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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,987	07/11/2005	Dolf Henricus Jozef Van Casteren	NL 030036	7997

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER

TRAN, THUY V

ART UNIT	PAPER NUMBER
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2821

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/29/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/541,987

Applicant(s)

VAN CASTEREN ET AL.

Examiner

Thuy V. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07/11/2005 & prel. amendment conc. filed.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 July 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 09/13/2006.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

This Office Action is responsive to the communication filed 07/11/2005 and the preliminary amendment concurrently filed therewith. In virtue of this amendment, claims 1-11 are currently presented in the instant application.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 09/13/2006 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings Objection

3. The drawings are objected to because Fig. 1 is not labeled correctly.

4. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections/ Minor Informalities

5. Claims 4-5 and 9 are objected to because of the following informalities:

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Claim 4, line 2, "a" should be changed to --the--;

Claim 5, line 2, "a" should be changed to --the--; and

Claim 9, line 7, "that" should be changed to --than--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

7. Claims 9-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claims 9-11 provide for the use of the circuit of claim 1, but, since the claims do not set forth any steps involved in the method/process, it is unclear what method/process applicants are intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 9-11 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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*A person shall be entitled to a patent unless –**(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.*

10. Claims 1-2 and 4-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Uchida (U.S. Patent No. 6,272,024 B2)

With respect to claim 1, Uchida discloses, in Figs. 1-3, a circuit for providing power to a load [LOAD] with a predetermined specification comprising (1) a transformer [2] having a primary winding [8] and a secondary winding [9] being part of a resonant circuit [9, 11], (2) first and second load connection nodes [12, 13] for coupling of the load in series to the secondary winding [9], and (3) a switch [3] coupled in series to the primary winding [8], an on and off-time of the switch [3] being controllable by a control element [5], for generating a voltage pulse (see Fig. 2) over the primary winding [8], characterized in that a diode [16] is coupled in parallel to the primary winding [8] for demagnetizing the transformer during the off-time of the switch [3], the on and off-time of the switch being predetermined (which is at a rate required for holding the converter output voltage constant; see col. 4, lines 15-16).

With respect to claim 2, Uchida discloses, in Fig. 1, a capacitor [11] is added in parallel to the secondary winding [9] for adjusting the resonance period of the resonant circuit [9, 11].

With respect to claim 4, Uchida discloses that the control element [5] is added to control the switch [3], characterized in that the control element [5] is selected to cause the on-time of the switch to be at least half of the resonance frequency (see col. 5, lines 17-32).

With respect to claim 5, Uchida discloses that the control element [5] is added to control the switch [3], characterized in that the control element [5] is selected to cause the off-time of the switch to be sufficient to reduce the current in the diode [16] to substantially zero (at time from t1 to t2; see Fig. 3) during demagnetization of the transformer (see col. 5, lines 33-52).

With respect to claim 6, Uchida discloses that the circuit is characterized in that a resistor [18] is connected in series to the diode [16] (see Fig. 1) to reduce the necessary switch off- time.

With respect to claim 7, Uchida discloses, in Figs. 1-3, a circuit and a corresponding method for providing power to a load [LOAD] comprising the steps of (1) applying a number of voltage pulses (see Fig. 2) to a primary winding [8] (see Fig. 1) of a transformer [2] so as to produce each time a high-voltage pulse (see Fig. 2) on the secondary winding [9] thereof, which pulse is shaped by the transformer inductances (of windings [8, 9]; see Fig. 1) and capacitances (of capacitor [11]; see Fig. 1) at the secondary side to create a load pulse, and (2) applying the load pulse to the load [LOAD]; characterized in that between every application of a voltage pulse a current path for the primary current is provided so that the transformer [2] is demagnetized and saturation of the transformer [2] is prevented.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchida (U.S. Patent No. 6,272,024 B2).

With respect to claim 3, Uchida discloses all of the claimed subject matter, as expressly recited in claim 1, except that the transformer has a couple factor smaller than 1. However, this difference is not of patentable merit since it has been commonly known in the art that the worse the coupling factor, the higher the necessary quality factor Q (see Prior Art of Record to Jansen, U.S. Patent No. 5,608,613; col. 4, lines 66-67 and col. 5, lines 1-2). Accordingly, to perform a coupling factor of smaller than 1 for the windings [8, 9] of the transformer of Uchida to improve the high quality factor Q of the circuit of Uchida would have been deemed obvious to a person skilled in the art.

With respect to claim 8, Uchida discloses all of the claimed subject matter, as expressly recited in claim 7, except that the load is a high-intensity discharge lamp and that a first series of pulses is applied to ignite the lamp, whereupon a second series of pulses is applied to operate the lamp during the electrode heating phase of said lamp. This difference, however, is not of patentable merit since the lamp has been well known as a load or lamp load and that the switching circuit of Uchida is operable to hold the output voltage constant (see col. 4, lines 14-16). For this advantage, to employ a HID lamp, in lieu of the load, in the circuit of Uchida, whereupon the first series of pulses is applied to ignite the lamp, and the second series of pulses is applied to operate the lamp during the electrode heating phase of said lamp, upon a desirability or environment of use, would have been deemed obvious to a person skill in the art.

Citation of relevant prior art

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Prior art Vinciarelli et al. (U.S. Patent No.: US RE38,196 E) discloses an apparatus and method for controlling the slew rate in a switching power converter;

Prior art Jansen (U.S. Patent No. 5,608,613) discloses a DC/DC converter;

Prior art Kitajima (U.S. Patent No. 5,278,748) discloses a DC-DC converter;

Prior art Govaert et al. (U.S. Patent No. 4,187,536) discloses a power supply device; and

Prior art G.R. Smythe (U.S. Patent No. 3,191,075) discloses a multistage amplifier.

Remarks

15. Claims 9-11 are not being provided with either rejection(s) over art or indicated allowable subject matter since they are defective.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy V. Tran whose telephone number is (571) 272-1828. The examiner can normally be reached on M-F (8:00 AM -4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

12/25/2006

A handwritten signature in black ink, appearing to read 'Thuy V. Tran', is positioned above the printed name.

THUY V. TRAN
PRIMARY EXAMINER